

## ZOOM

### TI-83 QUICK REFERENCE

The ZOOM feature is used to quickly and easily set convenient WINDOW parameters.

Press ZOOM followed by the number key corresponding to the ZOOM desired.

1. ZBOX (ZOOM Box) may be used to inspect more closely a rectangular area of the graph.

Press ZOOM 1. Use the arrow keys to move the cursor to any corner of the area to be displayed. Press ENTER. Again using the arrow keys, move the cursor to the opposite corner of the area to be displayed. Press ENTER. The window will be redrawn, showing only the area in the defined rectangle.

2. Zoom In magnifies the graph around the cursor location, i.e. it displays a smaller area of the graph in greater detail around the cursor location.

Press ZOOM 2 and move the cursor to a point which is to be the center of your magnified window. Press ENTER. The window is redrawn with the amount of magnification determined by the factors in Xfact and Yfact. See your manual for a discussion of these factors.

3. Zoom Out is used to enlarge the portion of the graph displayed in the window. It is just the opposite of Zoom In and is executed exactly as Zoom In except you press ZOOM 3.

4. ZDecimal (ZOOM Decimal) sets the window with Xmin=-4.7, Xmax=4.7, Ymin=-3.1, and Ymax=3.1. When you TRACE after executing ZOOM Decimal, the X-values used are tenths, e.g. 1.0, 1.1, 1.2, etc.

Press ZOOM 4.

5. ZSquare (ZOOM Square) adjusts the window so that the physical scales used on the X-axis and Y-axis are the same. This will have the effect of making circles appear as circles. (Most other ZOOMs or window settings result in circles appearing as ellipses.

Press  .

6. ZStandard (ZOOM Standard) sets Xmin=10, Xmax=10, Ymin=-10, and Ymax=10. You will find that many functions fit properly with a ZOOM Standard window.

Press  .

7. ZTrig (Zoom Trig) is typically used to plot trigonometric functions. The Xscl is set to  $\pi/2$ .

Press  .

8. ZInteger (Zoom Integer) redefines the window, resulting in integer values for X when you TRACE.

Press  . Move the cursor to the point which you want to be the center of the new window and press .

9. ZoomStat redefines the window so that all statistical data points are displayed.

Press  .

10. ZoomFit recalculates Ymin and Ymax so that the minimum and maximum values of the function, occurring between Xmin and Xmax, are plotted in the window.

Press  .